

## REMARKS

Applicants respectfully request reconsideration of the present application in view of the reasons that follow.

Claims 1, 3, 5-9, 11 and 13-16 stand finally rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,504,628 to Kanno et al. (hereinafter “Kanno”).

A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. Claims 1, 3, 5-9, 11 and 13-16 remain unchanged and are presently pending in this application for consideration.

Applicants respectfully submit that the claims are patentably distinguishable over the cited reference as required by § 102. Applicants further submit that the cited reference fails to disclose Applicants’ claimed image processing apparatus *wherein the conversion section converts the color image signals into the two-state signals in accordance with whether the color image signals are chromatic color or achromatic color image signals, and the conversion by the conversion section is a color conversion using a look-up table* as required by independent claim 1. Independent claim 9 is substantially similar in scope to independent claim 1 and recites that same patentable feature in the context of a step in a method claim. By contrast, the cited reference fails to disclose this claimed feature. Accordingly, independent claims 1 and 9 and claims dependent therefrom are patentably distinguishable over the cited reference. This distinction will be further described below.

### **THE CLAIMS DISTINGUISH OVER THE CITED REFERENCE**

Claims 1, 3, 5-9, 11 and 13-16 stand finally rejected as being anticipated by Kanno. In response, Applicants traverse the rejection and respectfully submit that the claims are allowable at least for the reasons that follow.

Applicants rely on MPEP § 2131, entitled “Anticipation – Application of 35 U.S.C. 102(a), (b), and (e),” which states that a “claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Section 103 amplifies the meaning of this anticipation standard by pointing out

that anticipation requires that the claimed subject matter must be “*identically* disclosed or described” by the prior art reference. (Emphasis added.) It is respectfully submitted that Kanno does not describe each and every element of any of the claims.

Embodiments of the present invention relate to an image processing apparatus. The image processing apparatus includes an input section, a printing color designating section, a conversion section and a color allocation section. The input section is configured to receive color image signals and the printing color designating section is configured to designate printing colors of two colors. The conversion section is configured to receive the color image signals which are received from the input section and to convert the color image signals to two-state signals in a dimension-dropped fashion, while the color allocation section is configured to allocate the printing colors of two colors which are designated by the printing color designating section to the converted two-state signals.

According to one embodiment of the present invention as recited in independent claim 1, *the conversion section converts the color image signals into the two-state signals in accordance with whether the color image signals are chromatic color or achromatic color image signals, and the conversion by the conversion section is a color conversion using a look-up table*. With this arrangement color turbidity at the time of color printing is reduced along with the manufacturing cost of the image processing apparatus since it is not necessary to add an image processing circuit for extracting color (*see*, Specification, page 3, lines 5-8 and page 7, lines 21-25). In addition, since RGB signals (a three-dimensional color space) are converted into two-state signals (i.e., chromatic color and achromatic color image signals, which is a two-dimensional color space), processing can be performed at a high speed (*see*, page 6, line 17 through page 7, line 25). One exemplary embodiment of the present invention is illustrated in FIGS. 1 and 2, which shows the conversion processing section 14 receiving the RGB signals from the scanner 13 and applies a color conversion processing to these signals carried out in a look-up table system, with the achromatic color area output as black and the chromatic area output as red (page 6, line 18 through page 7, line 8). Applicants respectfully submit that the cited reference fails to disclose this claimed feature and the advantages identified above.

Kanno discloses a color image forming apparatus capable of discriminating the color of an original image. Contrary to the Office Action's assertions, neither Kanno's color/monochrome determining section 142 nor Kanno's color/monochrome output color determining section 143 qualifies as the claimed conversion section. According to the present invention, the claimed conversion section is required to ***convert the color image signals into the two-state signals***. Kanno's color/monochrome determining section 142 determines if an output (a printed copy) should be in color or in black and white based on histogram information prepared and sent from a color characteristic abstracting section 141 (column 11, lines 32-35). The characteristic abstracting section 141, extracts ***the color characteristics of an original*** such as the ***chromatic distribution of an original*** using a multi-value generator section 151 and a histogram preparing section 152 (column 9, lines 60-65).

Histogram information is prepared based on ***multi-valued image signals*** from the multi-value generator section 151 (column 10, lines 43-46). FIGS. 8A, 8B, 8C, 9A, 9B and 9C illustrate obtained histograms for a black and white original and a color original, respectively, from the characteristic abstracting section 141, whereby histograms of image data R, G and B for the original in black and white has respective distribution patterns substantially identical relative to each other and histograms of image data R, G and B for the original in color has no significant correlation (column 11, lines 37-45). Kanno also discloses a color converter 161, which is part of the color/monochrome output color determining section 143, that converts image data into color data using a masking circuit designed on the basis of formula 2 (column 12, lines 16-38).

With respect to independent claim 1, Applicants respectfully submit that the subject matter claimed therein patentably distinguishes over the cited reference. Specifically, independent claim 1 requires ***the conversion by the conversion section is a color conversion using a look-up table***. The Office Action equates Kanno's threshold value memory 153 (column 10, lines 3, 4 and 8) for the multi-value generator section 151, which is used to compare entered image data R, G and B with predetermined threshold values (column 10, lines 4-6), to the claimed look-up table. Applicants respectfully disagree. As stated previously, histogram information is prepared based on multi-valued image signals from the multi-value generator section 151. Nowhere in Kanno is there any mention of a look-up

table. In addition, the multi-valued image signals are not *converted into two-state signals* as alleged in the Office Action by either the color/monochrome determining section 142 or the color/monochrome output color determining section 143. Likewise, the histogram information also has not been converted into the two state signals by either the color/monochrome determining section 142 or the color/monochrome output color determining section 143.

In view of the fact that the Kanno reference does not disclose each of the claimed features indicated above, this reference cannot be said to anticipate nor can it be said to render obvious the invention which is the subject matter of independent claim 1. Thus, independent claim 1 is allowable. Independent claim 9 is substantially similar in scope to independent claim 1 and recites that same patentable feature in the context of a step in a method claim. Thus, for the same reasons advanced above with respect to independent claim 1, independent claim 9 is also allowable.

Since independent claims 1 and 9 are allowable, claims dependent therefrom, namely claims 3, 5-8, 11 and 13-18 are also allowable by virtue of their direct or indirect dependence from allowable independent claims 1 and 9 and for containing other patentable features. Further remarks regarding the asserted relationship between any of the claims and the cited reference are not necessary in view of their allowability. Applicants' silence as to the Office Action's comments is not indicative of being in acquiescence to the stated grounds of rejection.

### CONCLUSION

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a

check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorize payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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